

IN THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Currently amended) A method for delivering a biological regulator into eukaryotic or prokaryotic cytoplasm or nucleus, comprising steps:

i) Preparing peptide transducing recombinant expression vector which comprises a DNA encoding protein transduction domain (PTD), a DNA encoding one or more homologous or heterologous binding protein having DNA or RNA binding factor or DNA or RNA binding domain, and expression regulatory sequence operatively bound to the vector;

ii) Obtaining a fusion protein by expression of the vector of step i) in a host cell;

iii) Obtaining binding complex by ~~binding of~~ combining the fusion protein of step ii) and one or more biological regulators selected from the group consisting of ~~fusion protein of step ii)~~, protein, DNA or RNA, fat, carbohydrate and chemicals by chemical or physical covalent or non-covalent bond; and

iv) Delivering the binding complex of step iii) into cytoplasm or nucleus ~~through routes including intramuscular, intraperitoneal, intravein, oral, nasal, subcutaneous, intradermal, mucosal or inhalation.~~

8. (Currently amended) A method for delivering a biological regulator into eukaryotic or prokaryotic cytoplasm or nucleus, comprising steps:

i) Preparing peptide transducing recombinant expression vector which comprises a DNA encoding protein transduction domain (PTD), a DNA encoding one or more homologous or heterologous binding protein having DNA or RNA binding factor or DNA or RNA binding domain, and expression regulatory sequence operatively bound to the vector;

ii) Obtaining a fusion protein by expression of the vector of step i) in a host cell;

iii) Preparing a recombinant expression vector which comprises a DNA encoding a biological regulator, a DNA or RNA binding sequence specifically binding to the DNA or RNA binding factor or the DNA or RNA binding domain, and expression regulatory sequence bound operatively to the vector;

iv) Obtaining a binding complex by combining the fusion protein from step ii) with the recombinant expression vector from step iii); and

v) Delivering the binding complex of step iv) into cytoplasm or nucleus ~~through routes including intramuscular, intraperitoneal, intravein, oral, nasal, subcutaneous, intradermal, mucosal or inhalation.~~

9. (Previously presented) The method according to claim 7, wherein step ii) comprises an additional step combining NLS (Nuclear Localization Sequence) with PTD of fusion protein.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Previously presented) The method according to claim 8, wherein step ii) comprises an additional step combining NLS (Nuclear Localization Sequence) with PTD of fusion protein.

15. (New) The method according to claim 7, wherein the binding complex is delivered into cytoplasm or nucleus *in vitro* or *in vivo*.

16. (New) The method according to claim 8, wherein the binding complex is delivered into cytoplasm or nucleus *in vitro* or *in vivo*.

17. (New) The method according to claim 7, wherein the binding complex is delivered into cytoplasm or nucleus through intramuscular, intraperitoneal, intravein, oral, nasal, subcutaneous, intradermal, mucosal or inhalation routes.

18. (New) The method according to claim 8, wherein the binding complex is delivered into cytoplasm or nucleus through intramuscular, intraperitoneal, intravein, oral, nasal, subcutaneous, intradermal, mucosal or inhalation routes.